

Title (en)  
MATERIAL SYSTEMS AND METHODS OF MANUFACTURING MATERIAL SYSTEMS

Title (de)  
MATERIALSYSTEME UND VERFAHREN ZUR HERSTELLUNG VON MATERIALSYSTEMEN

Title (fr)  
SYSTÈMES DE MATÉRIAUX ET PROCÉDÉS DE FABRICATION DE SYSTÈMES DE MATÉRIAUX

Publication  
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Application  
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Priority  
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Abstract (en)  
A material system may include: an aluminum layer; a glass composite layer adjacent to the first aluminum layer; and a carbon composite layer adjacent to the first glass composite layer, and opposite to the first aluminum layer. A method of manufacturing a material system may include: stacking an aluminum layer, glass composite layer that may include thermoplastic prepreg plies, and carbon composite layer so that the aluminum layer is adjacent to the glass composite layer, and the glass composite layer is adjacent to the carbon composite layer; and consolidating the thermoplastic prepreg plies to soften the aluminum layer. A method of manufacturing a material system may include: stacking an aluminum layer, glass composite layer that comprises thermoplastic resin, and carbon composite layer so that the glass composite layer is between the aluminum and carbon composite layers; and adjusting temperature and pressure to consolidate the stack.

IPC 8 full level  
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CPC (source: CN EP US)  
**B29C 43/56** (2013.01 - US); **B29C 65/02** (2013.01 - US); **B29C 66/712** (2013.01 - US); **B29C 66/7212** (2013.01 - US); **B29C 66/7392** (2013.01 - US); **B29C 66/7422** (2013.01 - US); **B29C 66/7444** (2013.01 - US); **B29C 70/885** (2013.01 - EP US); **B32B 5/024** (2013.01 - EP US); **B32B 5/12** (2013.01 - CN); **B32B 5/14** (2013.01 - EP US); **B32B 5/26** (2013.01 - CN EP US); **B32B 7/10** (2013.01 - EP US); **B32B 15/043** (2013.01 - US); **B32B 15/14** (2013.01 - CN EP US); **B32B 15/20** (2013.01 - CN EP US); **B32B 27/288** (2013.01 - EP US); **B32B 37/06** (2013.01 - CN US); **B32B 37/10** (2013.01 - CN US); **B29C 66/7465** (2013.01 - US); **B29C 2043/561** (2013.01 - US); **B29K 2071/00** (2013.01 - EP US); **B29K 2105/0872** (2013.01 - EP US); **B29K 2105/12** (2013.01 - EP US); **B29K 2105/253** (2013.01 - EP US); **B29K 2305/02** (2013.01 - US); **B29K 2307/04** (2013.01 - EP US); **B29K 2309/08** (2013.01 - EP US); **B29K 2705/02** (2013.01 - EP US); **B29K 2995/0078** (2013.01 - EP US); **B29L 2009/003** (2013.01 - EP US); **B32B 2260/021** (2013.01 - CN EP US); **B32B 2260/023** (2013.01 - US); **B32B 2260/046** (2013.01 - CN EP US); **B32B 2262/101** (2013.01 - CN EP US); **B32B 2262/106** (2013.01 - CN EP US); **B32B 2305/076** (2013.01 - US); **B32B 2311/24** (2013.01 - US); **B32B 2313/04** (2013.01 - US); **B32B 2315/08** (2013.01 - US); **B32B 2605/08** (2013.01 - CN EP US); **B32B 2605/10** (2013.01 - CN EP US); **B32B 2605/18** (2013.01 - CN EP US)

Citation (search report)  
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